## AP Statistics Semester 1 Practice Final Exam

## Chapter 1

1. Which of the following is true about the data below?

a. It is skewed right, with a mean of 165 and a median of 172 .
b. It is skewed right, with a mean of 172 and a median of 165 .
c. It is symmetric, with a mean of 172 and a median of 165 .
d. It is skewed left, with a mean of 165 and a median of 172 .
e. It is skewed left, with a mean of 172 and a median of 165 .
2. The last ten of Suzie's walks to school had the following lengths in minutes:

$$
12.3,11.7,10.5,15.5,11,14.1,12.2,12.5,8.2,9.8
$$

Which of the following statements is true?
a. The median is 11.78
b. The mean is 12.2
c. The median is 12.2
d. The data lends itself to representation in a pie chart.
e. The data would be well represented in a histogram.

1. The following two-way table shows the relationship between grade level and employment for 300 high school students.

|  | Employed | Unemployed, but looking for a job | Not interested in working |
| :--- | :--- | :--- | :--- |
| Upperclassmen | 106 | 36 | 8 |
| Underclassmen | 24 | 39 | 87 |

What relationship, if any, exists between grade level and employment status? Explain your answer, using appropriate data.
2. The following numbers are the calorie counts of hamburgers at 20 popular fast food restaurants.

$$
\begin{aligned}
& 432,394,505,789,307,326,357,495,803,721 \\
& 340,603,371,453,673,427,522,649,328,360
\end{aligned}
$$

a. Make a histogram of the data with bin width 50 .
b. Describe the distribution of the data.
c. If the highest calorie burger in the data, the Burger Queen McWhopper ( 803 calories), was replaced with the Seedz cafe vegan kale pumpkin spice wrap ( 207 calories), how would the following measures of center and spread be affected?
Mean

## Median

